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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,902	03/11/2004	Sam Gat-Shang Chu	AUS920031079US1	7019
7590 Kelly K. Kordzik P.O. Box 50784 Dallas, TX 75201		11/30/2007	EXAMINER LE, THONG QUOC	
			ART UNIT 2827	PAPER NUMBER
			MAIL DATE 11/30/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/798,902

Applicant(s)

CHU ET AL.

Examiner

Thong Q. Le

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8-10, 12, 18-20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-10, 18-20 is/are allowed.
- 6) ☒ Claim(s) 12 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Amendment filed on 11/12/2007 has been entered.
2. Claims 18-10,12,18-20,22 are presented for examination.

### *Response to Arguments*

3. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
4. Applicant's arguments with respect to claims 8-10,12,18-20,22 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 12, 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoki (U.S. Patent No. 5,150,326).

Regarding claim 12, Aoki disclose a register file (Figure 2) comprising:

a plurality of register file cells (Figure 2, 10) coupled to a bit line (Figure 2, DR);

a latch (Figure 3, 20) coupled to the bit line;

a transmission gate circuit (Figure 3, N10) coupled between an output of the latch and the bit line; and

an inverter (Figure 2, inverter of 13) coupled between the bit line and an input of the latch (inverter in 13 coupled between bit line DR and latch 20 of Figure 3).

Regarding claim 22, Aoki discloses a register file (Figure 1) comprising:

a plurality of register file cells (Figure 1, 30) coupled to a bit line (DW);

a latch coupled to the bit line (Figure 1, 31);

an inverter (Figure 1, 32) coupled between an output of the latch and the bit line (Figure 1); and

another inverter (Figure 1, 33, formed by a P-channel and an N-channel transistors) coupled between the bit line and an input of the latch.

7. Claims 12, 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Henkels et al. (U.S. Patent No. 5,481,495).

Regarding claim 2, Henkels et al. disclose a register file (Figure 4) comprising a plurality of register file cells (41) coupled to a bit line (Figure 1, BIT) ; a latch (ABSTRACT, extra latches, Figure 6, 62) coupled to the bit line; a transmission gate circuit (Figure 4) coupled between an output of the latch and the bit line; and an inverter (Figure 4) coupled between the bit line and an input of the latch.

Claim 22, Henkels et al. disclose a register file (Figure 8) comprising a plurality of register file cells (Figure 8, 81) coupled to a bit line (80) ; a latch coupled to the bit line (85) ; an inverter (Q11) coupled between an output of the latch and the bit line; and another inverter (Q8) coupled between the bit line and an input of the latch (Figure 9).

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claim 22 is rejected under 35 U.S.C. 102(e) as being anticipated by Lu et al. (Pub. U.S. Patent No. 2002/0071305).

Regarding claim 22, Lu et al. disclose a register file (Figure 6) comprising:  
a plurality of register file cells (Figure 6, 610) coupled to a bit line (630);  
a latch (Figure 6, 620) coupled to the bit line;  
an inverter (Figure 6, inverter in latch 1) coupled between an output of the latch and the bit line; and  
another inverter (Figure 6, 625, inverter in latch 3) coupled between the bit line and an input of the latch.

9. Claim 22 is rejected under 35 U.S.C. 102(e) as being anticipated by Amangelo et al. (U.S. Patent No. 6,654,937).

Regarding claim 22, Amangelo et al. disclose a register file (Figure 2) comprising:

a plurality of register file cells (Figure 2, cell ) coupled to a bit line (WR\_DATA);  
a latch (Column 4, lines 27-30) coupled to the bit line;  
an inverter (Figure 1, Q1, Q2) coupled between an output of the latch and the bit line; and  
another inverter (Figure 1, Q40, Q41) coupled between the bit line and an input of the latch.

***Allowable Subject Matter***

10. Claims 8-10, 18-20 are allowed..

Claims 8-10, 18-20 include allowable subject matter since the prior art made of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations. The prior arts do not teach the claimed invention having a register file comprising: a first plurality of cells coupled to a first local bit line; a global bit line; a first tri-state inverter coupled between the first local bit line and the global bit line, the first tri-state inverter controlled by a first local select signal; a second plurality of cells coupled to a second local bit line; a second tri-state inverter coupled between the second local bit line and the global bit line, the second tri-state inverter controlled by a second local select signal; a latch with its input coupled to the global bit line; and a third tri-state inverter coupled between an output of the latch and the global bit line, the third tri-state inverter controlled by a hold signal.

Application/Control Number:  
10/798,902  
Art Unit: 2827

Page 6

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Le whose telephone number is 571-272-1783. The examiner can normally be reached on 8:00am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarabian Amir can be reached on 571-272-1852. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thong Q. Le  
Primary Examiner  
Art Unit 2827

A handwritten signature in black ink, appearing to read 'Thong Q. Le', with a horizontal line extending to the left.